

PATENT ABSTRACTS OF JAPAN

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(54) CHEMICALLY MODIFIED PEPTIDE HORMONE

(57)Abstract:

PURPOSE: The titled hormone obtained by bonding directly a polyoxyethylene group to at least one primary amino group in the molecule.

CONSTITUTION: A group shown by the formula (R is terminal oxygen-protecting group such as alkyl, alkanoyl, etc.; n is positive number) is directly bonded to at least one primary amino group in the molecule, to give a chemically modified peptide hormone. Peptide hormone is a general term of a substance which obtained by bonding two or more amino acids by peptide bond, has ≤ 100 amino acids, and has activity such as metabolic regulation, antiviral action, antitumor action, etc. For example, insulin, ACTH, gastrin, calcitonin, etc. may be cited. The peptide hormone of this invention has

500W10,000, especially 3,000W8,000mol.wt. The group shown by the formula has ≤25,000, especially 250W6,000mol.wt.

EFFECT: The peptide hormone has retarded clearance and shows effectively its activity for a long period and has low toxicity and antigenicity.

